

# M 4.1, 13km WSW of Niland, CA

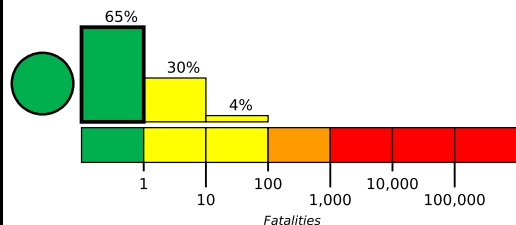
Origin Time: 2021-06-12 04:49:38 UTC (Fri 21:49:38 local)  
Location: 33.2060° N 115.6560° W Depth: 2.6 km

**PAGER**  
**Version 6**

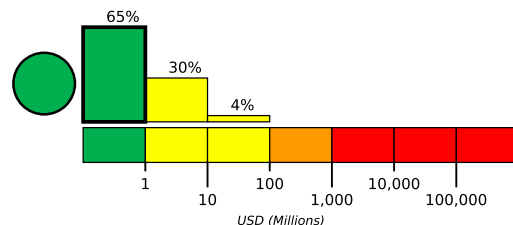
Created: 2 days, 11 hours after earthquake

## Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.



## Estimated Economic Losses

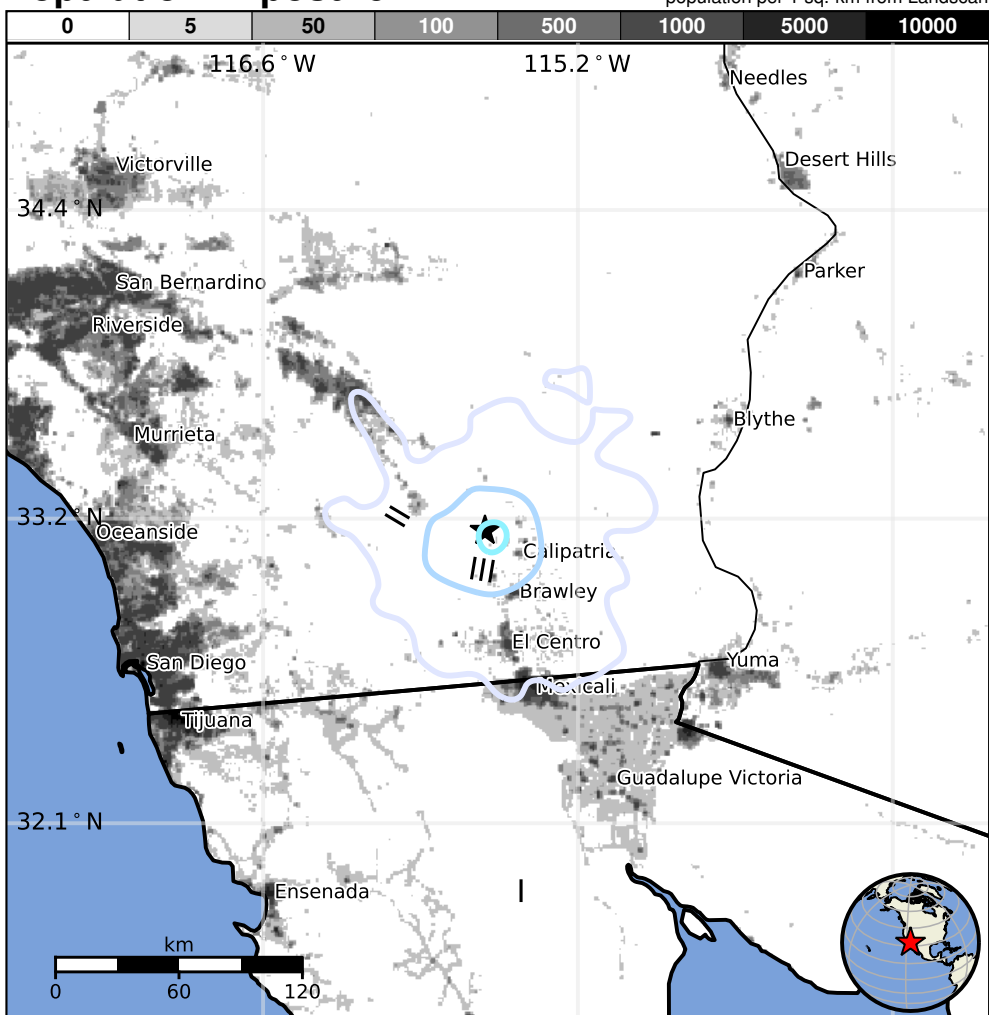


## Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		12,140k	638k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

\*Estimated exposure only includes population within the map area.

## Population Exposure



## Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

## Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1991-06-28	246	5.6	VI(1,267k)	1
1992-06-28	135	7.3	VIII(23k)	1
1971-02-09	285	6.6	IX(21k)	65

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

## Selected City Exposure

from GeoNames.org

MMI	City	Population
III	Niland	1k
III	Calipatria	8k
III	Westmorland	2k
II	Brawley	25k
II	Salton City	4k
II	Imperial	15k
I	Mexicali	597k
I	Tijuana	1,376k
I	San Diego	1,307k
I	Riverside	304k
I	Ensenada	257k

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.  
<https://earthquake.usgs.gov/earthquakes/eventpage/ci39936288#pager>

bold cities appear on map.

(k = x1000)

Event ID: ci39936288